



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,451	01/20/2004	Dong Yu	M61.12-0582	3046
69316 7590 12/21/2009 MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052				
EXAMINER SHAH, PARAS D				
ART UNIT 2626		PAPER NUMBER		
NOTIFICATION DATE 12/21/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBOUTON@MICROSOFT.COM  
vfiling@microsoft.com  
stevensp@microsoft.com

### Office Action Summary

**Application No.**

10/761,451

**Applicant(s)**

YU ET AL.

**Examiner**

PARAS SHAH

**Art Unit**

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7, 18, 19, 32, 37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7, 18, 19, 32, 37 and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This communication is in response to the Amendments and Arguments filed on 09/04/2009. Claims 7, 18, 19, 32, 37, and 28 remain pending and have been examined, while claims 1-6, 8-17, 20-31, and 33-36 have been cancelled, and claims 37 and 38 have been newly added. The Applicants' amendment and remarks have been carefully considered, but they do not place the claims in condition for allowance. Accordingly, this Action has been made FINAL.
2. All previous objections and rejections directed to the Applicant's disclosure and claims not discussed in this Office Action have been withdrawn by the Examiner.

***Response to Amendments and Arguments***

3. Applicant's arguments (pages 5-6) filed on 09/04/2009 with regard to claims 7 and 37 have been fully considered but they are not persuasive for the reasons mentioned below.

With respect to the 112, 1<sup>st</sup> paragraph, rejection for written description and enablement, the Applicant indicates that the claims were cancelled in order to overcome the rejections. However, this is not the case. Claim 7 still contains limitations that were presented in the earlier filed claim set for which the 112, 1st paragraph was applied. Similarly, newly added claim 37 contains similar limitations on page 4, line 6-8 as rejected in claim 7. Since no arguments were presented with respect to these claims, the Applicant is directed to the 112, 1st paragraph rejections below. Hence, the rejection

with respect to claim 7 is maintained and the newly added claim is also rejected under the same grounds.

***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on 09/04/2009 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

5. The information disclosure statement filed 09/25/2009 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the associated document does not contain a translation for the NPL document submitted. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 7 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added limitation of "... to selectively change at least one HMM parameter with an existing pronunciation" is not supported by the specification. The cited sections mentioned by the Applicant, in the Applicant's Remarks, page 7, lines 16-25 describes the use of HMM and transition probability. The cited portions are described in the Background Section and describe the modeling of a word. The second section denoted by the Applicant only states that a "probability of newly observed known probabilities might also be increased." This portion does not provide support since the section does not state that such probability that is increased occurs via a HMM parameter or an Acoustic model. The section merely describes that the language model is updated in lines 11 of page 21. There is no mention in any of the mentioned pages or anywhere else in the Specification that such change is a change to a HMM parameter. Hence, the Applicant's newly amended limitations are not supported by the Specification, where it would reasonably convey to one skilled in the art that the Applicant had possession of the invention.

8. Claims 7 and 37 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the correction of speech and updating of a language model, does not reasonably provide enablement for "change at least one HMM parameter associated with an existing pronunciation". The specification does not

enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The limitation of "change at least one HMM parameter associated with an existing pronunciation" for which the Applicant is claiming to be their invention, does not provide enablement as page 21, lines 21-24 where the probability of a newly observed pronunciation is increased. It does not describe to one skilled in the art as to how this increase takes place, what is increasing and by how much is it increasing. Further, the Background section does not provide enablement for the mentioned limitation since it merely describes how modeling of a word occurs using HMM and transition probabilities. The Applicant has failed to link the background section with Applicant's change of an HMM parameter since the Applicant has not provided adequate description that would enable one of ordinary skilled in the art to make and use the invention, specifically the changing in a HMM parameter.

9. Claims 18, 19, 32, 37, and 38 are rejected for being dependent upon a rejected base claim.

***Allowable Subject Matter***

10. Claims 7 and 37 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1<sup>st</sup> paragraph, set forth in this Office action.

11. The following is a statement of reasons for the indication of allowable subject matter: None of the cited reference either alone or in combination thereof teach or suggest the confidence score being calculated using the function " $1/[d/f/\log(len\ 1 + len2)]$ ", where d is the distance between the recognized pronunciation and a best match

in a lexicon,  $f$  is a frequency that the same pronunciation is pronounced, and  $len1$  and  $len2$  are the lengths of phonemes in a new pronunciation and the closest pronunciation, respectively." as recited in claim 34.

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PARAS SHAH whose telephone number is (571)270-1650. The examiner can normally be reached on MON.-THURS. 7:30a.m.-4:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571)272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/  
Supervisory Patent Examiner, Art Unit 2626

/Paras Shah/  
Examiner, Art Unit 2626

12/08/2009